Right-of-Way Pest Control
Test Plan Development

I. Pest Identification
   a) Bi-annuals
   b) Annuals
   c) Perennials
   d) Desirable vs. Pest (selective control)
   e) Monocot
   f) Dicot

Pests
   k) Ants
      1. Southern fire ant
      2. Red Imported fire ant (Qualified Applicator)
   l) Cockroaches
   m) Beetles
      1. Flat-head borer
      2. Palo Verde
      3. Bark Beetles
      4. Bill Bugs
   n) Pests of Public Health concern
      1. Ticks
   o) Scorpions
      1. Bark scorpion
   p) Wasps/Bees
   q) Noctuid moths/insects that come to lights/occasional invaders
      1. Aphids
      2. Whiteflies
      3. Psyllids
      4. Stink bugs
   r) Vertebrates
      1. Gophers
   s) Rodent
   t) Scouting/ Monitoring/ Trapping for Pests
   u) Growth Regulators

Weeds
   a. Clovers
      1. Black medic
      2. Bur clover
   b. Mustards
      1. London rocket
      2. Mustards (Sahara, Black, Wild Radish)
   c. Composites
      1. Groundsel
      2. Sow thistle
   d. Other
      1. Cheeseweed
      2. Red Stem Filaree

   g) Insect – growth stage, appropriate time for control (thresholds)
   h) Rodent
   i) Scouting/ Monitoring/ Trapping for Pests
   j) Growth Regulators
e. **Summer annual broadleaves**
   1. Spurge
   2. Horseweed
   3. Pigweed
   4. Common purslane
   5. Russian thistle
   6. Puncturevine
   7. Toadflax
   8. Thistles
   9. Globe Chamomile
   10. Hairy Fleabane
   11. Camphorweed

f. **Winter annual grass weeds**
   1. Hare Barley
   2. Red brome

g. **Summer annual grass weeds**
   1. Goosegrass
   2. Southwestern cupgrass
   3. Crabgrasses
   4. Sandbur
   5. Bermudagrass

h. **Perennial weeds**
   1. Purple Nutsedge
   2. Yellow Nutsedge
   3. Kyllinga
   4. Silverleaf nightshade
   5. Johnsongrass
   6. Buffelgrass
   7. Fountaingrass
   8. Camelthorn
   9. Hogpotato

II. **Read and Comprehend Label and Labeling**
   a) **Safety Issues**
      1. Spray Drift
      2. Run Off
      3. Surface Waters (lakes, rivers, washes)
   b) **Worker Safety – PPE**
      1. Application Rates
         i. Site
      c) **Calculate chemicals**
         i. Pests
      2. Post-emergent
         i. Spot spray
         ii. Spray to run-off
      3. Pre-emergent
         i. Spray to Wet
         ii. Broadcast
      4. Injection
         i. Stump treatment
      5. Drench
      6. Traps
      7. Use of Adjuvants
   d) **Types of Applications**
      1. Pre-emergent
      2. Post-emergent
      3. Injection
      4. Drench
      5. Baits
   e) **Tank Mixes**
   f) **Growth Regulators**

III. **Planning and Implementing a Vegetation /Pest Management Plan**
   a) **Appropriate Product formulations**
   b) **Secondary poisoning**
   c) **Application Timing**
      1. Weather
      2. Life Stage
   d) **Pesticide Resistance Issues**
   e) Monitoring after Application
   f) **Mowing**
   g) **IPM**
   h) **Bio/cultural controls**
      1. Beneficial Insects
      2. Bacillus Thuringiensis
IV. Laws and Rules
   a) Ground water protection reporting
      1. A.A.C. R3-8-505
         i. Reporting Requirements
         ii. Where to find the list (QA)
      2. QA Responsibilities

V. Equipment Types, Uses, Maintenance and Calibration
   a) Nozzles
   b) Pumps
   c) Hoses
   d) Hand Sprayers
   e) Backpack Sprayers
   f) Broadcast Sprayers
   g) Granular Spreaders

Resources:

- Rights-of-Way Vegetation Management (Washington State University Extension);
- Weeds of California and other Western States Vol. 1 & 2 (University of California);
- Truman’s Scientific Guide to Pest Management Operations Seventh Edition;
- Handbook on Pests of Community Environments in the Desert Southwest United States;
- UC IPM;
- US Forest Service Region 3 Invasive Weeds;
- Arizona Revised Statute Title 3 Chapter 20 & Arizona Administrative Code Title 3
  Chapter 8 – Pest Management Division; and
- National Pesticide Applicator Certification Core Manual